

Claims

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3 1. A method of operating a file server, said method including steps for  
4 identifying a first file on said file server with a first security style selected  
5 from among a plurality of security styles; and  
6 enforcing said first security style for all accesses to said first file.  
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8 2. A method as in claim 1, wherein said plurality of security styles in-  
9 cludes a Windows NT security style.  
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11 3. A method as in claim 1, wherein said plurality of security styles in-  
12 cludes a Unix security style.  
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14 4. A method as in claim 1, including steps for  
15 associating said first file with a subset of files in a file system; and  
16 limiting said subset of files to a security subset of said plurality of security  
17 styles;  
18 wherein attempts to set permissions in said file system tree are restricted to  
19 said security subset.  
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21 5. A method as in claim 4, wherein said security subset includes a  
22 Windows NT security style.

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6. A method as in claim 4, wherein said security subset includes a Unix security style.

7. A method as in claim 1, including steps for identifying said first file with a second security style in response to a file server request.

8. A method as in claim 7, including steps for associating said second security style with a file server request for setting permissions for said first file when said file server request is successful.

9. A method as in claim 7, wherein said steps for identifying include steps for translating a first set of permissions associated with said first file in said first security style to a second set of permissions in said second security style, wherein said second set of permissions is no less restrictive than said first set of permissions.

10. A method as in claim 1, wherein said steps for enforcing include steps for

recognizing a first set of permissions associated with said first file in said

first security style;

defining a first user type associated with said first security style;

1 translating a user from a second user type associated with a second security  
2 style into said first user type; and  
3 enforcing a file server request from said second user type using said first  
4 user type and said first set of permissions.

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6 11. A method as in claim 10, wherein said steps for translating are per-  
7 formed with regard to access control limits applicable to said first file at a time of said  
8 steps for enforcing.

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10 12. A method as in claim 10, wherein said steps for translating are per-  
11 formed with regard to access control limits applicable to said first file at a time said ac-  
12 cess control limits are set.

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14 13. A method as in claim 1, wherein said steps for enforcing include  
15 steps for

16 translating a first set of permissions associated with said first file in said  
17 first security style to a second set of permissions in a second security style, wherein said  
18 second set of permissions is no less restrictive than said first set of permissions; and

19 enforcing a file server request in said second security style using said sec-  
20 ond set of permissions.

1           14. A method as in claim 13, wherein said steps for translating are per-  
2   formed with regard to access control limits applicable to said first file at a time of said  
3   steps for enforcing.

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5           15. A method as in claim 13, wherein said steps for translating are per-  
6   formed with regard to access control limits applicable to said first file at a time said ac-  
7   cess control limits are set.

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9           16. A file server including  
10       a set of files available said file server, each said file having an associated  
11   security style selected from among a plurality of security styles available on said file  
12   server;

13       wherein said file server enforces said associated security style for all ac-  
14   cesses to said file.

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16           17. A file server as in claim 16, wherein said plurality of security styles  
17   includes a Windows NT security style.

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19           18. A file server as in claim 16, wherein said plurality of security styles  
20   includes a Unix security style.

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22           19. A file server as in claim 16, including

1 a subtree of files in said file system associated with a security subset of said  
2 plurality of security styles;  
3 wherein said file server restricts attempts to set permissions in said subtree  
4 to said security subset.  
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6 20. A file server as in claim 19, wherein said security subset includes a  
7 Windows NT security style.  
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9 21. A file server as in claim 19, wherein said security subset includes a  
10 Unix security style.  
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12 22. A file server as in claim 16, wherein said file server is capable of al-  
13 tering the security style associated with said file in response to a file server request.  
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15 23. A file server as in claim 22, wherein said file server is capable of al-  
16 tering the security style associated with said file in response to a file server request when  
17 said file server request is successful.  
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19 24. A file server as in claim 22, wherein said file server is capable of  
20 translating a first set of permissions associated with said file in a first security style to a  
21 second set of permissions in a second security style, wherein said second set of permis-  
22 sions is no less restrictive than said first set of permissions.

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2        25.    In a file server having a plurality of files, a data structure associating  
3 a security style with each said file, said security style being selected from among a plu-  
4 rality of security styles available on said file server.

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6        26.    A data structure as in claim 25, wherein said plurality of security  
7 styles includes a Windows NT security style.

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9        27.    A data structure as in claim 25, wherein said plurality of security  
10 styles includes a Unix security style.

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12        28.    In a file server having a plurality of files and a security style associ-  
13 ated with each said file, said security style being selected from among a plurality of secu-  
14 rity styles available on said file server, a data structure associating a security subset of  
15 said plurality of security styles with a subtree of said files available on said file server.

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17        29.    A data structure as in claim 28, wherein said security subset includes  
18 a Windows NT security style.

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20        30.    A data structure as in claim 28, wherein said security subset includes  
21 a Unix security style.